More Information

Get daily air quality information by calling toll-free

1–866 DAILY AIR
1-866 324 5924

or by going to
www.cleanairwisconsin.org

Respiratory Health
www.lungusa.org **or**
www.milwaukee.gov/citygov/health

AQI, Ozone and Ozone Mapping
www.epa.gov/airnow

Open Burning
www.dnr.state.wi.us/org/caer/ce/ob/

Car Emissions and Congestion
www.commuterchoice.gov/about/facts.htm **or**
www.dot.gov

Gas Cap Wrench
www.cleanairwisconsin.org

Alternative Fuel Vehicles
www.afdc.nrel.gov **or**
www.wicleancities.org

K–12 Air Education
www.easybreathers.org **or**
www.dnr.state.wi.us/org/caer/ce/eek

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Keep this guide handy at home, at work or in your classroom. When everyone helps reduce pollution, it all adds up to cleaner air.

Imagine a healthier environment that we can enjoy without coughing and wheezing. A place where kids can run and play with fewer asthma attacks. You can help make this a reality by taking six steps to improve air quality.

Six Steps to Improving Air Quality and Protecting Your Health

1. Refuel in the evening and tighten your gas cap.
   Refueling during the evening and tightening your gas cap can prevent the creation of ozone by reducing the amount of harmful fumes escaping and having the chance to bake all day in the sun.
2. Avoid open burning.
   Burn barrels and open burning cause air pollution by sending tiny particles, chemicals and gases into the air that irritate your lungs. Reducing waste, reusing, recycling, composting organic material or landfilling household trash is better for you and the environment.
3. Plan your trips before you go.
   It's easy! Chances are, you're already doing it. Combine errands into one trip and listen to the traffic report before you leave home. When you know before you go, you get things done efficiently, which helps reduce air pollution and traffic congestion.
4. Care for your car.
   Regular maintenance and tune-ups, changing the oil and checking tire inflation can reduce your car's emissions by half! They can also improve gas mileage, extend your car's life and increase its resale value.
5. Take mass transit, share a ride, carpool, walk or bike.
   Even once or twice a week reduces traffic congestion and air pollution and saves you money.
6. Conserve energy.
   The fossil-fueled power plants that make the electricity you use at your home and work can contribute to poor outdoor air quality. By conserving energy, you can make it easier for power plants to reduce air pollution, in turn saving you money and benefiting the air. So use energy-efficient light bulbs and appliances, and turn them off when you're not using them. Run dishwashers and clothes washers only when they're full.

It all adds up to cleaner air

What You Should Know About the AIR You're Breathing

Air Quality in Wisconsin

Are Your Lungs at Risk?

On average, you breathe 15 times each minute. Most of the time, you do it without even thinking. Breathe in, breathe out. It's that easy. But what are you inhaling each time you take a breath? Is it fresh, clean air or does it contain invisible hazards? When it comes to air quality, what you don't know *can* hurt you, but what you do know can protect your health. Read on.

Who is at Risk?

Everyone is affected by poor air quality, but certain groups are particularly sensitive:

- Children under 14 (they spend a lot of time outdoors and their lungs are still developing)
- Adults over 65
- Adults who exercise or work vigorously outdoors
- People with respiratory disease such as asthma, emphysema or chronic bronchitis

Clear and Present Symptoms

Air pollution, especially ozone, affects thousands of people each year — some severely enough to require hospitalization. You can't see or smell ozone, but your lungs are still affected by it. Breathing elevated levels of ozone can cause:

- *Throat irritation*
- *Shortness of breath*
- *Coughing and wheezing*
- *Increased severity and occurrence of asthma attacks*
- *Aggravation of emphysema, chronic bronchitis and other lung diseases*

Your Lungs Can Get an "Ozone Burn"?

Remember your last sunburn? Your skin was probably painfully red for a day or two. Well, breathing ozone is like "sunburning" your lungs. When it's inhaled, ozone makes lungs red and swollen. This can weaken the lungs' defenses against infections, and it may cause lung disease.

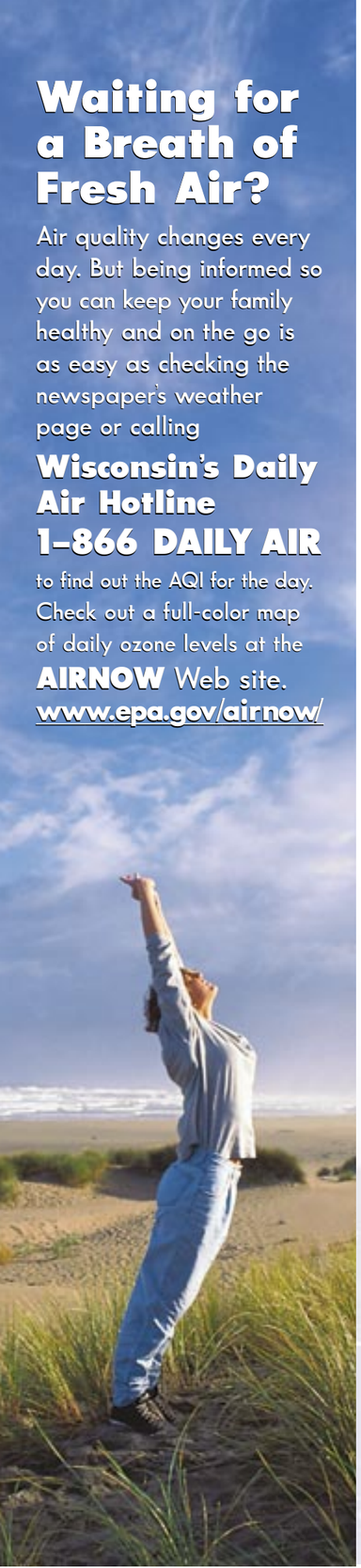
Here's what you can do to protect your health...

Waiting for a Breath of Fresh Air?

Air quality changes every day. But being informed so you can keep your family healthy and on the go is as easy as checking the newspaper's weather page or calling

Wisconsin's Daily Air Hotline
1–866 DAILY AIR

to find out the AQI for the day. Check out a full-color map of daily ozone levels at the **AIRNOW** Web site. **www.epa.gov/airnow/**



INDEX VALUES	AIR QUALITY DESCRIPTOR	POSSIBLE HEALTH EFFECTS	PROTECT YOUR HEALTH
0 to 50	Good	No health effects are expected.	No health impacts are expected when air quality is in this range.
51 to 100	Moderate	Unusually sensitive individuals may experience respiratory effects from prolonged outdoor exposure to ozone.	Unusually sensitive people should consider limiting prolonged outdoor exertion.
101 to 150	Unhealthy for Sensitive Groups	Sensitive individuals may experience respiratory symptoms (coughing, deep–breath pain) and reduced lung function.	Active children and adults and people with respiratory disease should limit prolonged outdoor exertion.
151 to 200	Unhealthy	Sensitive individuals have a higher chance of experiencing respiratory symptoms and reduced lung function, causing breathing difficulty. At this level, anyone could experience respiratory effects.	Active children and adults and people with respiratory disease should avoid prolonged outdoor exertion; everyone else should limit prolonged outdoor exertion.
201 to 300	Very Unhealthy	Sensitive individuals will likely experience respiratory symptoms and reduced lung function, causing breathing difficulty. People with asthma or other respiratory conditions will be severely affected, leading some to increased medication usage and seek medical attention.	Active children and adults and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.

Air Quality Index – Helping You Breathe Easier

The Air Quality Index (AQI, shown above) is a color-coded scale created by the Environmental Protection Agency (EPA) to show you how much ozone and other pollutants are in the air each day. The AQI is divided into color categories that represent the different levels of health concern. On hot humid days, check the AQI.

Think of the AQI as a stop-and-go light. When the AQI color is green, air quality is GOOD. Go ahead with your activity without any worries. But when the AQI color is orange or red, air quality is UNHEALTHY — at first for certain sensitive people, and then for everyone as the values get higher. You should try to avoid prolonged outdoor exertion.

The AQI will let you know if you should take it easy when outside or take extra precautions if you are an at-risk person. By checking the AQI, you and your family can stay healthier by being prepared.

How is the AQI Calculated?

Each day, air monitors throughout the state measure the concentrations of five major pollutants:

- *Ground-level ozone*
- *Particulate matter*
- *Carbon monoxide*
- *Sulfur dioxide*
- *Nitrogen dioxide*

The measurement for each pollutant is converted into an AQI value using standard formulas developed by the EPA. Then the highest value becomes the AQI value for that day. For example, if the AQI value for ozone is 90 and sulfur dioxide is 45, the AQI value for the day would be 90 (yellow color range = MODERATE air quality).

NEWSPAPER FORECAST

LOCAL CONDITIONS

TODAY'S AIR QUALITY

Good (green); Moderate (yellow); Unhealthy for Sensitive groups (orange); Unhealthy (red); Very Unhealthy (dark red)

LOCAL CONDITION FOR 24 HOURS ENDING AT 7 P.M. TUESDAY

Temp.	Time	Norm	Record	Year
High 47	11:22 a.m.	57	85	1960
Low 26	4:14 a.m.	39	22	1910

Htg. Degree Days	Days	Month	Season
Yesterday	28	448	5,562

Check out a full-color map of daily ozone levels at the **AIRNOW** Web site. **www.epa.gov/airnow/**

Or Call the Wisconsin Daily Air Hotline at:
1–866 DAILY AIR

Isn't Ozone Good?

Ozone can be good or bad depending on where it is found.

- GOOD OZONE: Ozone occurs naturally in the Earth's upper atmosphere – 10 to 30 miles above the Earth's surface – where it forms a protective layer that shields us from the sun's harmful ultraviolet rays. This beneficial ozone, often referred to as the ozone layer, is gradually being depleted by manmade chemicals.

- BAD OZONE: In the Earth's lower atmosphere – our breathing space – high concentrations of ozone are created from our pollution. Pollutants emitted by motor vehicles, power plants, industrial manufacturing and other sources react chemically in sunlight and form ground-level ozone, a harmful respiratory irritant. Ozone pollution is a concern during summer months when weather conditions needed to form it – lots of sun and hot temperatures – normally occur.

"Ozone is good up high, but bad nearby."

Other air pollutants affect our health

Is my burn barrel part of the problem?

Burn barrels and open burning are major contributors to air pollution. If you've ever burned grass clippings or garbage in your backyard, you've probably walked away coughing and rubbing red, irritated eyes. That's because open burning sends tiny particles, chemicals and gases into the air that you and your neighbors inhale and that can irritate your lungs. Anything that is burning – from candles to campfires, yard debris to household trash – can irritate your respiratory system. So stop the coughing: reduce, reuse, recycle, compost and send non-recyclables to a landfill. Please remember that open burning is banned or restricted in many areas. Plus, the burning of business – and household – generated waste is illegal in the state of Wisconsin.

Is my car part of the problem?

Did you know that even when your car is not running, you are losing money and contributing to poor air quality? Each year, up to 30 gallons of gas can evaporate from your car if you have a loose or faulty gas cap.

So save money by keeping your fuel in your tank. Simply tighten your gas cap until it clicks four or five times. The clicking lets you know that the cap is sealed. If you have weak hands and have a hard time tightening or loosening your gas cap, a Gas Cap Wrench is now available to assist you. Visit *www.cleanairwisconsin.org* to order a FREE Gas Cap Wrench.

Another way to reduce car emissions is to buy a hybrid vehicle or an alternative fuel vehicle (AFV). AFVs are technologically advanced, cleaner–burning cars that use domestic energy sources for fuel. They have cleaner emissions than gasoline vehicles, and some of them can even produce emissions that are cleaner than the air we breathe. Visit Wisconsin Clean Cities at *www.wicleancities.org* for more information. And kids, check out *www.easybreathers.org*.